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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/756,642	01/03/2001	Paul J. Rank	0007056-0055	7532

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SONNENSCHN NATH & ROSENTHAL LLP
P.O. BOX 061080
WACKER DRIVE STATION, SEARS TOWER
CHICAGO, IL 60606-1080

EXAMINER

HILLERY, NATHAN

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/756,642

Applicant(s)

RANK ET AL.

Examiner

Nathan Hillery

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All. b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: IDS filed on 2/2/04.
2. Claims 1 – 44 are pending in the case. Claims 1, 12, 23, and 34 are independent.

Specification

3. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

Art Unit: 2176

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5. The abstract of the disclosure is objected to because undue length, repetition of title, and recitation of purported merits. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 – 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young et al. (US005280575A).

8. **Regarding independent claim 1**, Young et al. discloses an invention that provides a new and improved data structure for storing data relating to, for example, tables and similar items. Young et al. do not explicitly teach **storing on a first record property data of said spreadsheet file; storing on a second record access data of said spreadsheet file; storing on a third record spreadsheet cell data for a plurality of spreadsheet cells**. However, Young et al. do teach that *FIGS. 1 through 5D depict, at various level of detail, a tabular data structure in accordance with the invention. With reference to FIG. 1, a tabular data structure 10 includes three primary portions, including a descriptor portion 11, a header portion 12 and a table contents portion 13. As will be described in greater detail below in connection with FIGS. 5A*

Art Unit: 2176

through 5C, the table contents portion 13 contains, in one or more data structures each representing a table, data representing a table, which comprises an array of cells.

Tabular data may be generated by, for example, a spreadsheet program in which data organized in the form of an array of, generally, two or more dimensions. The data stored in cells in a table may comprise literal data, that is, data representing input by an operator or other source, or it may comprise data representing a formula which defines a cell value in terms of an arithmetic expression with reference to other cells in the table. Alternatively, as described below, data for a cell may be represented or provided by a source external to the tabular data structure 10 (Column 1, line 66 – Column 2, line 18). It would have been obvious to one of ordinary skill in the art at the time of invention to be motivated to store the property, access, and cell data each in its own record or space because the invention of Young et al. would process the actions of its users faster if the similar information were all grouped in the same area than if the similar information were stored in various locations especially when the users are implementing the invention of Young et al. on systems with limited process speed.

9. **Regarding dependent claim 2**, Young et al. teach that *in a refinement, each row in the data structure includes a row header including, implicitly or explicitly, a row number and at least zero or more cells, the row number identifying a row in a table for the cell* (Column 1, lines 39 – 43), which provide that **said property data includes the number of rows and cells in said spreadsheet file.**

10. **Regarding dependent claims 3 and 4**, Young et al. teach that *the descriptor portion 11 includes a plurality of fields, including a format version identification field 14*

Art Unit: 2176

*that identifies a format version for the tabular data structure 10 (Column 2, lines 19 – 22) and that in addition, the header portion 12 includes a title field 21 which contains a title for the tabular data structure 10 and a data field 22 which contains a date identifying when the tabular data structure was created or last modified or updated (Column 2, lines 43 – 48), which provide that **said property data includes the name and version of the spreadsheet file and said property data includes date information of said spreadsheet file.***

11. **Regarding dependent claim 5**, Young et al. teach that *the table metadata field 64 may also contain a default formats field 74 which contains default formats for the rows and columns comprising the table defined by table definition 59 (Column 6, lines 40 – 43), which provide that **said property data includes default data formatting information.***

12. **Regarding dependent claim 6**, Young et al. teach that *the table header portion 60 may include fields 61 and 62 which may contain values identifying, respectively, the maximum number of columns and rows which the table may contain (Column 5, line 67 – Column 6, line 3), which provide that **said access data includes the number of columns of said spreadsheet file accessed by said second record.***

13. **Regarding dependent claim 7**, Young et al. teach that *as a further refinement, each cell includes a header portion and a value portion, the header portion containing a cell number identifying a column in a table for the cell (Column 1, lines 43 – 46), which provide that **said access data includes cell IDs of cells in said columns accessed by said second record.***

Art Unit: 2176

14. **Regarding dependent claim 8;** Young et al. teach that *the table contents portion 13 includes one or more table definitions each of which may, in turn, include a metadata portion, which, in turn, includes column entries each of which contains information regarding processing and display of a specific column of data in the table* (Column 3, lines 43 – 48), which provide that **a plurality of records storing access data, wherein each of said plurality of records storing access data accesses a subset of columns of said spreadsheet file.**

15. **Regarding dependent claim 9,** Young et al. do not explicitly teach that **said cell data includes the number of cells stored in said third record.** However, Young et al. do teach that *the table contents portion 13 contains, in one or more data structures each representing a table, data representing a table, which comprises an array of cells* (Column 2, lines 4 – 7). It would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to store the number of cells because the invention of Young et al. uses an array to hold the cells and the skilled artisan would want to keep track of the number of elements in an array for memory conservation.

16. **Regarding dependent claim 10,** Young et al. teach that *a cell 91 includes ... a cell value/expression field 97, which contains the literal value for the cell, and/or an expression by which the value for the cell can be computed* (Column 8, lines 15 – 20), which provide that **said cell data includes the data values stored in cells stored in said third record.**

17. **Regarding dependent claim 11,** Young et al. teach that *the table contents portion 13 contains, in one or more data structures each representing a table, data*

Art Unit: 2176

representing a table, which comprises an array of cells (Column 2, lines 4 – 7), which provide for a **plurality of records storing cell data, each of said plurality of records storing cell data storing a subset of the cells of said spreadsheet file.**

18. **Regarding independent claim 12**, the claim incorporates substantially similar subject matter as claim 1, and is rejected along the same rationale.

19. **Regarding dependent claim 13**, the claim incorporates substantially similar subject matter as claim 2, and is rejected along the same rationale.

20. **Regarding dependent claim 14**, the claim incorporates substantially similar subject matter as claim 3, and is rejected along the same rationale.

21. **Regarding dependent claim 15**, the claim incorporates substantially similar subject matter as claim 4, and is rejected along the same rationale.

22. **Regarding dependent claim 16**, the claim incorporates substantially similar subject matter as claim 5, and is rejected along the same rationale.

23. **Regarding dependent claim 17**, the claim incorporates substantially similar subject matter as claim 6, and is rejected along the same rationale.

24. **Regarding dependent claim 18**, the claim incorporates substantially similar subject matter as claim 7, and is rejected along the same rationale.

25. **Regarding dependent claim 19**, the claim incorporates substantially similar subject matter as claim 8, and is rejected along the same rationale.

26. **Regarding dependent claim 20**, the claim incorporates substantially similar subject matter as claim 9, and is rejected along the same rationale.

Art Unit: 2176

27. **Regarding dependent claim 21**, the claim incorporates substantially similar subject matter as claim 10, and is rejected along the same rationale.
28. **Regarding dependent claim 22**, the claim incorporates substantially similar subject matter as claim 11, and is rejected along the same rationale.
29. **Regarding independent claim 23**, the claim incorporates substantially similar subject matter as claim 1, and is rejected along the same rationale.
30. **Regarding dependent claim 24**, the claim incorporates substantially similar subject matter as claim 2, and is rejected along the same rationale.
31. **Regarding dependent claim 25**, the claim incorporates substantially similar subject matter as claim 3, and is rejected along the same rationale.
32. **Regarding dependent claim 26**, the claim incorporates substantially similar subject matter as claim 4, and is rejected along the same rationale.
33. **Regarding dependent claim 27**, the claim incorporates substantially similar subject matter as claim 5, and is rejected along the same rationale.
34. **Regarding dependent claim 28**, the claim incorporates substantially similar subject matter as claim 6, and is rejected along the same rationale.
35. **Regarding dependent claim 29**, the claim incorporates substantially similar subject matter as claim 7, and is rejected along the same rationale.
36. **Regarding dependent claim 30**, the claim incorporates substantially similar subject matter as claim 8, and is rejected along the same rationale.
37. **Regarding dependent claim 31**, the claim incorporates substantially similar subject matter as claim 9, and is rejected along the same rationale.

Art Unit: 2176

38. **Regarding dependent claim 32**, the claim incorporates substantially similar subject matter as claim 10, and is rejected along the same rationale.
39. **Regarding dependent claim 33**, the claim incorporates substantially similar subject matter as claim 11, and is rejected along the same rationale.
40. **Regarding independent claim 34**, the claim incorporates substantially similar subject matter as claim 1, and is rejected along the same rationale.
41. **Regarding dependent claim 35**, the claim incorporates substantially similar subject matter as claim 2, and is rejected along the same rationale.
42. **Regarding dependent claim 36**, the claim incorporates substantially similar subject matter as claim 3, and is rejected along the same rationale.
43. **Regarding dependent claim 37**, the claim incorporates substantially similar subject matter as claim 4, and is rejected along the same rationale.
44. **Regarding dependent claim 38**, the claim incorporates substantially similar subject matter as claim 5, and is rejected along the same rationale.
45. **Regarding dependent claim 39**, the claim incorporates substantially similar subject matter as claim 6, and is rejected along the same rationale.
46. **Regarding dependent claim 40**, the claim incorporates substantially similar subject matter as claim 7, and is rejected along the same rationale.
47. **Regarding dependent claim 41**, the claim incorporates substantially similar subject matter as claim 8, and is rejected along the same rationale.
48. **Regarding dependent claim 42**, the claim incorporates substantially similar subject matter as claim 9, and is rejected along the same rationale.

Art Unit: 2176

49. **Regarding dependent claim 43**, the claim incorporates substantially similar subject matter as claim 10, and is rejected along the same rationale.

50. **Regarding dependent claim 44**, the claim incorporates substantially similar subject matter as claim 11, and is rejected along the same rationale.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Hillery whose telephone number is (703) 305-4502. The examiner can normally be reached on M - F, 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on (703) 305-9792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NH


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER